

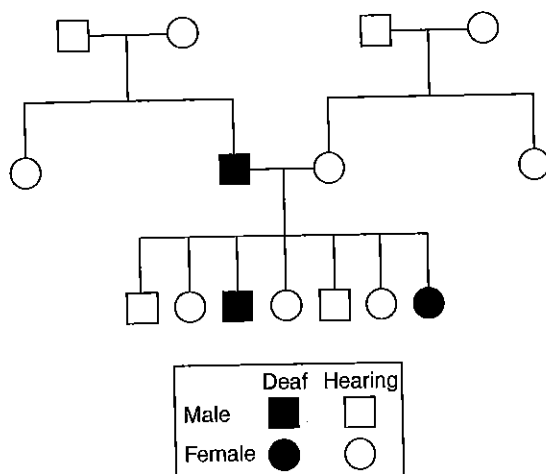
Chapter 14 The Human Genome

Chapter Vocabulary Review

Completion On the lines provided, complete the following sentences with one of the following terms:

autosomes karyotype pedigree nondisjunction sex chromosomes

1. A picture of chromosomes arranged in pairs is an example of a (an) _____.
2. The X and Y chromosomes are called the _____.
3. The 44 chromosomes that are not involved in sex determination are the known as the _____.
4. The chart below, showing how a trait is passed from one generation to the next in a family, is called a (an) _____.



5. Down syndrome is caused by _____.

Multiple Choice On the lines provided, write the letter of the answer that best completes the sentence or answers the question.

- _____ 6. Genes located on X or Y chromosomes are called
 - a. sex organs.
 - a. autosomes.
 - c. a pedigree.
 - d. sex-linked.
- _____ 7. One example of a sex-linked disorder is
 - a. sickle cell disease.
 - c. Down syndrome.
 - b. hemophilia.
 - d. Tay-Sachs disease.
- _____ 8. Nondisjunction results in a(an)
 - a. inactivated chromosome.
 - c. normal number of genes.
 - b. abnormal number of chromosomes.
 - d. normal number of chromosomes.

- _____ 9. What happens when nondisjunction occurs?
- a. Chromosomes fail to separate.
 - b. Chromosomes separate normally.
 - c. Sections of chromosomes are deleted.
 - d. Sections of chromosomes become inverted.
- _____ 10. How is DNA fingerprinting commonly used?
- a. to convict criminals or overturn convictions
 - b. to sequence all human DNA
 - c. to rapidly sequence DNA with computers
 - d. to identify and locate human genes
- _____ 11. DNA samples for human DNA fingerprinting can be obtained from
- a. sperm.
 - b. blood.
 - c. hair with attached tissue.
 - d. all of the above.

Short Answer *On the lines provided, answer the following questions.*

12. What type of picture would a biologist look at to determine whether a fetus has Down syndrome?

13. Why are the X and Y chromosomes called sex chromosomes?

14. How many autosomes are found in a human diploid cell?

15. What type of chart would help a genetic counselor track the passage of a trait through the generations of a family?

Chapter 14 The Human Genome**Graphic Organizer****Compare/Contrast Table****Types of Genetic Disorders**

Using information from the chapter, complete the compare/contrast table below to compare different types of genetic disorders. If there is not enough room in the table to write your answers, write them on a separate sheet of paper.

Type of Disorder	Cause	Can Be Inherited	Affects Both Males and Females?	Examples
Autosomal	1.	Yes	Yes	2.
Sex-linked	Sex-linked genetic disorders are caused by alleles on the X or Y chromosome.	Yes	3.	Colorblindness, Duchenne muscular dystrophy, Hemophilia
Chromosomal	4.	No	Yes	5.